

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : **06-047977**

(43)Date of publication of application : **22.02.1994**

(51)Int.Cl.

**B41J 17/36**

**B41J 17/32**

(21)Application number : **04-299907**

(71)Applicant : **SAMSUNG ELECTRONICS  
CO LTD**

(22)Date of filing : **10.11.1992**

(72)Inventor : **NAM JOO-HAN**

(30)Priority

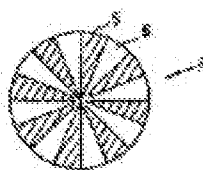
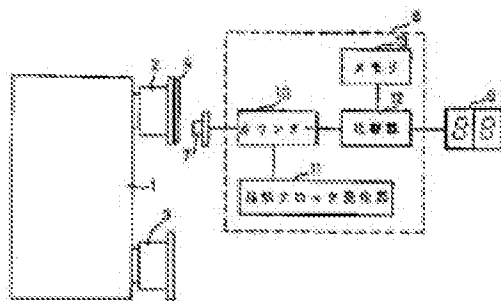
Priority number : **91 9120768** Priority date : **21.11.1991** Priority country : **KR**

## (54) RESIDUAL QUANTITY OF CARTRIDGE RIBBON INDICATOR FOR COLOR VIDEO PRINTER

(57)Abstract:

**PURPOSE:** To obtain a residual quantity of cartridge ribbon indicator in which a user can be notified the number of printable sheets by providing means for determining the current number of remaining sheets by comparing a detected rotational period of reel with a reference period stored in a memory, and means for indicating the residual quantity of ribbon.

**CONSTITUTION:** When the speed of a winding reel 2 is detected, a photosensor 7 receives a scanning light beam reflected intermittently from a reflector where reflecting faces 6 and nonreflecting face 5 are combined alternately while being split at a constant angular interval. The received scanning light beam is converted into an electric pulse signal and transmitted to a counter 10 in a microcomputer 8. The counter 10 counts the reference clock from a reference clock generator 11 along with the pulse signal from the



photosensor 7 and latches the number of clocks when the number of reel pulse signal reaches a predetermined count. The latched number of clocks represents the rotational period of the reel 2. Subsequently, the microcomputer 8 compares the detected rotational speed of the reel 2 with a stored reference and calculates the residual quantity of ribbon which is indicated by means of a 7-segment element 9.